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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/702,505	10/31/2000	Donald M. Gray III	14531.74	9995

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EXAMINER
BRIER, JEFFERY A

ART UNIT	PAPER NUMBER
2672	

DATE MAILED: 02/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

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	Application No.		Applicant(s)
Office Action Summary	09/702,505		GRAY ET AL.
	Examiner		**Art Unit**
	Jeffery A. Brier		2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-27_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-27_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _31 October 2000_ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)	4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) ☐ Other: .

DETAILED ACTION

Drawings

1.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5)

because they include the following reference sign(s) not mentioned in the description:

501, 502, and 503. A proposed drawing correction, corrected drawings, or amendment

to the specification to add the reference sign(s) in the description, are required in reply

to the Office action to avoid abandonment of the application. The objection to the

drawings will not be held in abeyance.

Specification

2.   The disclosure is objected to because of the following informalities:

At page 14 line 15 "200 is includes" should be " 200 includes";

At page 22 line 6 "Block 707 is blending unit" should be "Block 707 is a blending

unit"; and

At page 23 lines 7-9 the ratio is not stated.

Appropriate correction is required.

Claim Objections

3.   Claim 21 is objected to because of the following informalities: at line 6 "space

one" should be "space to one". Appropriate correction is required.

4.   Claim 12 is objected to because of the following informalities: at line 5 "steam

headers" should be "stream headers". Appropriate correction is required.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6.   Claims 6, 7, 12, 14, 15, 21-27 are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention.

Claim 6:

This claim due to the alternative language claims blending one source. Applicant

did not describe this, thus, this claim fails to distinctly claim the invention. In applicants

system more than one sources are blended.

Claim 7:

This claim has the same problem that claim 6 has. An art rejection cannot be

made since it is speculative as to how to blend one source.

Claim 12:

The alternative language used in this claim renders this claim indefinite because

at line 2 more than one header is claimed to define one slice, at line 3 more than one

span header define one span, at line 5 more than one stream header defines one data

stream. Thus, this claim does not clearly claim applicant's invention. An art rejection

cannot be made since it is speculative as to what applicant is claiming.

Claims 14 and 15:

The source of the data streams is not clear in these two claims.

Claim 15:

The alternative language used in this claim renders this claim indefinite because at lines 3 and 5 one data stream is blended. To perform blending more than one data stream is needed. Thus, this claim does not clearly claim applicant's invention. An art rejection cannot be made since it is speculative as to where the data streams are from and how to blend one data stream.

Claim 21:

This claim claims at line 4 the step "receiving the data streams at a blending unit" and at line 6 claims "directing the data streams having the same color space one or more blending units". It is not clear how the step at line 4 can occur before the step at line 6. Thus, the order of the steps in this claim are out of the order.

Claim 22:

This claim does not correct the problems of claim 21.

Claim 23:

This claim claims "the act of reading the image data to the display device". Parent claim 21 claims at line 11 "blending the outputs to produce an image data stream". It is not clear where the step of claim 23 is to be placed amongst the steps in the parent method claim. The term "reading" also renders this claim indefinite because the image data stream of claim 21 is not stored, thus, it is not read.

Claim 24:

This claim claims "the act of receiving the data streams further comprises the act of offsetting the data streams". It is not clear what is meant by "offsetting the data streams".

Claim 25:

This claim claims "the act of offsetting the data streams further comprises the act of centering the data streams around zero". It is not clear what is meant by "centering the data streams around zero".

Claim 26:

This claim claims "the act of zeroing the data streams at the one or more blending units whose color space is not the same as the associated color space of the one or more blending unit". It is not clear what is meant by "zeroing the data streams".

Claim 27:

This claim does not correct the problems of claim 21.

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8.   Claims 1, 2, 3, 4, 5, 9, 10, 11, 13, 14, 17, 18, and 20 are rejected under 35

U.S.C. 102(b) as being anticipated by Perlman et al., U.S. Patent No. 5,745,909. A

limitation by limitation detailed analysis of claims 1, 2, 3, 5, 9, 10, 11, 13, 14, 17, 18, and

20 and Perlman follows.

Claim1	Perlman et al., U.S. Patent No. 5,745,909
1. In a system including a display device for displaying an image, the image having one or more sources, a method for compositing the image, the method comprising the acts of:	See the HTML code at lines 1-20 where it is seem that plural images are composited to form the total image presented by the web browser.
dividing the image into one or more slices, each slice including at least one line;	This is read to be one slice with at least one line. Each image of Perlman's web page is a slice having at least one line.
dividing each line in each slice into at least one span, wherein each span has at least one associated source included in the one or more sources and each line in each slice has the same associated sources;	This is read to be the slice's line is one span, thus, one source per line. Each image of Perlman's web page is a slice having at least one line from one source, for example a web site.
for each span in each line, reading data from the associated source without using an image buffer; and	The HTML code at lines 1-20 causes the web browser to read data from one or more sources. Column 7 lines 10-35 describes displaying the web page images as the instructions are received. Thus, Perlman teaches displaying a web page image without storing the read data of the source(s) in an image buffer.
displaying the data on the display device.	Column 7 lines 10-35 describes displaying the web page images after the instructions have been executed.

Claim 2:

The read data is stored at the server in Perlman's system. This claim is different

than claim 1 which claimed image buffer while this claim claims a memory of the system

such as a server's memory.

Claim 3:

The HTML code at column 5 lines 1-20 is control structure having context information for the image of the web page.

Claim 4:

The file name is an image header, one slice header, one span header, and one stream header since the file name refers to an image having one slice, one line per span, and a data stream. Applicant has failed to give a definition to the broad term header. Thus, the system defined by Perlman's system including the web site storing the image data meets this claim.

Claim 5:

Inherently the data read by Perlman is contiguous pixel data since non contiguous data would require additionally code at lines column 5 lines 1-20.

Claim 9:

The equations at column 6 lines 10 and 17 blend the line above (previous), the current line, and the line below (next) so flicker that occurs in this image forming the larger image is reduced. Column 7 lines 10-35 describes executing instructions as they are received.

Claim 10	Perlman et al., U.S. Patent No. 5,745,909
10. In a system including a display device for displaying an image, each image being generated from one or more sources, each source having data, a method for compositing the image, the method comprising the acts of:	See the HTML code at lines 1-20 where it is seem that plural images are composited to form the total image presented by the web browser.

generating a control structure having context information describing the image, wherein the context information identifies the one or more sources;	The HTML code at lines 1-20.
reading the data of the one or more sources according to the context information without storing the data in an image buffer; and	The HTML code at lines 1-20 causes the web browser to read data from one or more sources. Column 7 lines 10-35 describes displaying the web page images as the instructions are received. Thus, Perlman teaches displaying a web page image without storing the read data of the source(s) in an image buffer.
displaying the read data on the display device as the data is read from the one or more sources.	Column 7 lines 10-35 describes displaying the web page images after the instructions have been executed.

Claim 11:

The HTML code forms the web page form many image sources. Each image forms a part of the whole image. Each image forms a span of one or more lines. Each image is a slice. The limitation one or more slices is read to be one slice, Perlman teaches one slice for each image of the web page and since Perlman has more than one image Perlman teaches slices. The limitation each slice having one or more lines is read to be all lines of Perlman's image. The limitation each line having one or more spans is read to be a line having one span, Perlman teaches a line having one span for each image. Thus, this claim is anticipated by Perlman by applicants use alternative language in claiming the invention.

Claim 13:

The read data is stored at the server in Perlman's system. This claim is different than claim 10 which claimed image buffer while this claim claims a memory of the system such as a server's memory.

Claim 14:

The lines of data used in the filter equations at lines 10 and 17 are data streams.

Claim 17	Perlman et al., U.S. Patent No. 5,745,909
17. In a system including a display device for displaying an image, a method for reducing the flicker of a portion of the image, the method comprising the acts of:	See the abstract, column 5 lines 37-40, 53-57, and the HTML code at lines 1-20 where it is seem that plural images form the total image presented by the web browser and any one of them may be filtered to reduce any flicker that that one image may make on the television display.
reading data from a source, wherein the data is the portion of the image that is subject to flickering, and wherein the data defines a span included in a line;	See the HTML code on column 5 lines 1-20 and line 39. Each reference to an image (< IMG SRC =(filename) causes the web browser to read data from a source and each image defines a span included on a line.
reading previous data from the source, wherein the previous data corresponds to a previous span in a previous line, wherein the previous span is vertically adjacent to the span;	The image undergoing filtering is filtered according to the equations on column 6 lines 10 and 17. In the equation the line above (previous) is used in the filtering process and it is read from the source in order to be present in the filter process.
reading next data from the source, wherein the next data corresponds to a next span in a next line and wherein the next span is vertically adjacent to the span; and	In the equation the line below (next) is used in the filtering process and it is read from the source in order to be present in the filter process.
blending the previous data, the data, and the next data such that the flicker that would otherwise exist at the portion of the image is reduced.	The equations at column 6 lines 10 and 17 blend the line above (previous), the current line, and the line below (next) so flicker that occurs in this image forming the larger image is reduced.

Claim 18:

The lines of data used in the filter equations at lines 10 and 17 are data streams.

Claim 20:

This claim claims "the display device displays images using interlaced fields".

The display of Perlman is a television, column 3 lines 65-67, which is an interlaced

display device, thus, the span of the filtered image is displayed on the corresponding

line of the interlaced display device.

9.   Claims 1, 2, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by

Nemoto et al., U.S. Patent No. 4,642,621. A limitation by limitation detailed analysis of

claims 1, 2, and 8 and Nemoto follows.

Claim1	Nemoto et al., U.S. Patent No. 4,642,621
1. In a system including a display device for displaying an image, the image having one or more sources, a method for compositing the image, the method comprising the acts of:	See the abstract where it is seem that plural images are composited to form the total image presented by the display device.
dividing the image into one or more slices, each slice including at least one line;	This is read to be one slice with at least one line. The composited image of Nemoto is a slice having at least one line.
dividing each line in each slice into at least one span, wherein each span has at least one associated source included in the one or more sources and each line in each slice has the same associated sources;	This is read to be the slice's line has at least one span, thus, at times one source per line and at others more than one source per line. Each image of Nemoto is a source and the lines which has information from both sources are lines that have two spans with one span for each source of the composited image.
for each span in each line, reading data from the associated source without using an image buffer; and	The image information is read from either memory 100 or memory 110 and sent directly to the display device without using an image buffer.
displaying the data on the display device.	See figure 7(b).

Claim 2:

The read data is stored in memory 100 and memory 110 in image memory 20.

at the server in Perlman's system. This claim is different than claim 1 which claimed

image buffer while this claim claims a memory of the system.

Claim 8:

This claim claims "the act of refraining from reading some of the one or more

sources if data from another one of the sources is visible and opaque".   Nemoto

teaches sources that have portions of the source visible and opaque. When a portion of

source 100 is visible and opaque it is read and when it is not visible reading is refrained

at which time source 110 is read.

Claim Rejections - 35 USC § 103

10.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

11.   Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Perlman et al., U.S. Patent No. 5,745,909, in view of Ranganathan, U.S. Patent No.

5,764,201.

Note the discussion of Perlman in the rejection of claims 17 and 18 above.

Perlman does not explicitly teach converting the output data stream to the display

device color space.

Ranganathan teaches at column 8 line 57 to column 9 line 3 a color space
converter 66 that the output data stream to the display device color space.
Ranganathan does this in a system that blends two data streams, see Figs. 3, 8A, 8B,
and column 5 line 61 to column 6 line 9.

It would have been obvious to one of ordinary skill in the art at the time the
invention was made to convert the color space of the output image data stream of
Perlman to the color space of the display device since this is critical to having the image
accurately displayed on the television monitor and since Ranganathan teaches
converting a source's color space to the color space of the display device.

12.   Claims 6 and16 are rejected under 35 U.S.C. 103(a) as being unpatentable over
Perlman et al., U.S. Patent No. 5,745,909, in view of Netravali, U.S. Patent No.
4,454,506.

Perlman teaches the lines of data used in the filter equations at lines 10 and 17
are from vertically adjacent spans (lines) and these lines are from a source while these
two claims claim sources.

Perlman does not teach filtering data from vertically adjacent sources.

Netravali teaches that it was well know at the time applicant made the invention
to perform filter vertically adjacent sources. Column 2 lines 25-53.

It would have been obvious to one of ordinary skill in the art at the time the
invention was made to filter data in Perlman from vertically adjacent sources to prevent
any flicker that may occur at the edge between one image and another image, Netravali
at column 2 lines 20-24.

Allowable Subject Matter

13.   Claims 21-27 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action. The prior art of record fails to teach or suggest directing the data streams having the same color space to one or more blending units and blending, by each blending unit, the data streams having the color space that is the same as the associated color space of the blending unit to produce outputs.

14.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.   Gordon, U.S. Patent No. 6,481,012, describes MPEG which divides the image into slices and transmits slices to a receiver which combines the slices. Nagata, U.S. Patent No. 6,466,224, teaches changing the color space of one source and blending the result with another source. Porter, U.S. Patent No. 6,208,354, teaches compositing an image without using an image buffer. Truong, U.S. Patent No. 5,258,843, teaches compositing an image without using an image buffer, see figures 1a and 1b.

15.   Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Jeffery A. Brier whose telephone number is (703)

305-4723. The examiner can normally be reached on M-F from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Michael Razavi, can be reached at (703) 305-4713).

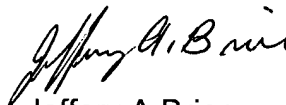**Any response to this action should be mailed to:**

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or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Technology Center 2600 Customer Service Office

whose telephone number is (703) 306-0377.

Jeffery A Brier
Primary Examiner
Art Unit 2672